

IN THE CLAIMS:

All claims currently pending and under consideration in the referenced application are shown below. Claims 1-23, 31-41, 46, and 47 have been canceled. Claims 30 and 43-45 have been withdrawn. Thus, Claims 24-30 and 42-45 are pending in this application. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-23. (Canceled).

Claim 24. (Previously Presented) A triple lumen vascular access catheter for percutaneous entry into a blood vessel of the cardiovascular system of a patient by way of advancement along an insertion guide wire, the triple lumen vascular access catheter comprising:

an outer tube having a proximal end and a distal end;

an inner tube having a proximal end and a distal end and defining therewithin a first lumen, said inner tube having an outer diameter less than an inner diameter of said outer tube, said inner tube being disposed within said outer tube to define an interior space between the outer diameter of said inner tube and an inner diameter of said outer tube, wherein an inner diameter of said inner tube is sized for accommodating an insertion guide wire having an outer diameter from about 0.036 inches to about 0.038 inches;

a first septum extending from the outer diameter of said inner tube to the inner diameter of said outer tube;

a second septum extending from the outer diameter of said inner tube to the inner diameter of said outer tube,

wherein the first septum and said second septum separate said interior space into a second lumen located on one side of a transverse cross section of the first septum, said inner tube, and said second septum, and a third lumen located on an opposite side of the transverse cross section of the first septum, said inner tube, and said second septum;

a tapered distal tip section at said distal end of said outer tube, wherein an outer surface of said distal tip section tapers radially inwardly from said distal end of said outer tube and terminating in a first aperture with which said first lumen communicates;

a second aperture formed through said outer tube proximate said distal end thereof, communicating with the second lumen; and

a third aperture formed through said outer tube proximate said distal end thereof, communicating with the third lumen.

Claim 25. (Previously Presented) A catheter as recited in Claim 24, wherein the inner diameter of said inner tube is about 0.04 inches.

Claim 26. (Previously Presented) A catheter as recited in Claim 24, wherein the first septum extends a distance between said outer diameter of said inner tube and said inner diameter of said outer tube equal to a distance the second septum extends between said outer diameter of the inner tube and said inner diameter of said outer tube.

Claim 27. (Previously Presented) A catheter as recited in Claim 26, wherein said first septum and said second septum are coplanar.

Claim 28. (Previously Presented) A catheter as recited in Claim 26, wherein a transverse cross section of said second lumen is congruent with a transverse cross section of said third lumen.

Claim 29. (Previously Presented) A catheter as recited in Claim 28, wherein each of said second lumen and said third lumen have a C-shaped transverse cross section.

Claim 30. (Withdrawn) A catheter as recited in Claim 28, wherein each of said second lumen and said third lumen have a D-shaped transverse cross section.

Claims 31-41. (Canceled)

Claim 42. (Previously Presented) A triple lumen catheter for insertion into a patient by way of advancement along an insertion guide wire, said the triple lumen catheter comprising:

a catheter body comprising:

an outer tube having a proximal end and a distal end;

an inner tube having a proximal end and a distal end and defining therewithin a first lumen, said inner tube having an outer diameter less than an inner diameter of said outer tube, said inner tube positioned within

said outer tube to define an interior space between the outer diameter of said inner tube and the inner diameter of said outer tube;

a first septum extending between the outer diameter of said inner tube to the inner diameter of said outer tube; and

a second septum extending between the outer diameter of the inner tube and the inner diameter of the outer tube,

wherein the first septum and said second septum separate the interior space into a second lumen located on one side of a transverse cross section of the first septum, said inner tube, and said second septum, and a third lumen located on an opposite side of the transverse cross section of the first septum, said inner tube, and said second septum;

a frustoconical distal tip section extending from the distal end of said outer tube, an outer surface of the frustoconical distal tip section tapering radially inwardly from said distal end of said outer tube toward said inner tube and terminating in a first aperture at the apex of said distal tip section, the first aperture in communication with the first lumen;

a plurality of second apertures formed through said outer tube proximate said distal end thereof in communication with the second lumen;

a plurality of third apertures formed through said outer tube located further from said distal end thereof than said plurality of said second apertures, the plurality of third apertures in communication with the third lumen; and

an access means attached to said proximal end of said outer tube and said proximal end of said inner tube for affording fluid communication individually with said first lumen, said second lumen, and said third lumen.

Claim 43. (Withdrawn) The triple lumen catheter as recited in Claim 42, wherein said access means comprises:

a connector attached to said proximal end of said outer tube and said proximal end of said inner tube;

a first access tube attached to said connector and communicating therethrough with said first lumen;

a second access tube attached to said connector and communicating therethrough with said second lumen; and

a third access tube attached to said connector and communicating therethrough with said third lumen.

Claim 44. (Withdrawn) The triple lumen catheter as recited in Claim 43, further comprising:

a cylindrical attachment fitting rotatably mounted on an exterior of said connector; and

a pair of coplanar suture wings extending laterally from opposite sides of the cylindrical attachment fitting.

Claim 45. (Withdrawn) The triple lumen catheter as recited in Claim 43, wherein said first access tube carries a closure clamp.

Claim 46-47. (Canceled)